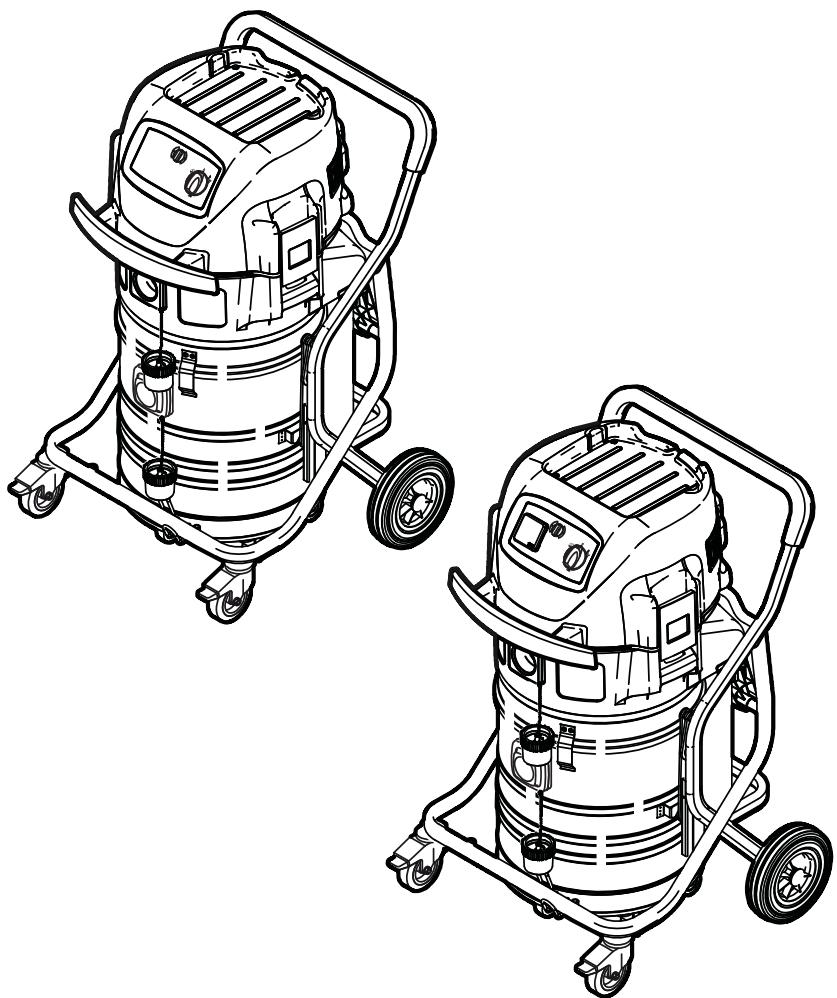




ATTIX 965-0H/M SD XC
ATTIX 965-2H/M SD XC

Operating Instructions



Nilfisk
ALTO

Why Compromise

Contents



1	Important safety instructions	2
2	Description	2.1 Operating elements	8
		2.2 Operating panel.....	9
3	Before starting the cleaner	3.1 Assembling the vacuum cleaner.....	10
		3.1.1 Taking accessories out of the packaging.....	10
		3.1.2 Before starting the cleaner	11
		3.1.3 Inserting the safety filter bag	11
		3.1.4 Inserting the disposal bag	13
4	Control / Operation	4.1 Connections	15
		4.1.1 Electrical connection	15
		4.2 Switching on the vacuum cleaner.....	15
		4.2.1 Switch "I-0-II" ¹⁾	15
		4.2.2 Switch „auto-0-I“ ¹⁾	15
		4.2.3 Suction power control ¹⁾	15
		4.2.4 Auto-On/Off-Operation - "auto" switch position ¹⁾	16
		4.3 Check volume flow monitor	17
		4.4 Acoustic warning	17
		4.5 Cleaning the filter element	17
5	Applications and methods	5.1 Techniques	18
		5.1.1 Picking up dry substances.....	18
		5.1.2 Picking up liquids.....	18
6	After using the cleaner	6.1 Switching the vacuum cleaner off and storage.....	19
7	Maintenance	7.1 Maintenance plan.....	20
		7.2 Maintenance work	21
		7.2.1 Emptying the dirt tank	21
		7.2.2 Replacing the disposal bag	22
		7.2.3 Replacing the safety filter bag	23
		7.2.4 Replacing filter element "H"	24
8	Troubleshooting	26
9	Further information	9.1 Recycling the cleaner	27
		9.2 Guarantee	27
		9.3 Tests and approvals.....	27
		9.4 EC declaration of conformity	27
		9.5 Technical data	28
		9.6 Optional accessories	28



1 Important safety instructions

Symbols used to mark instructions



Prior to using the appliance for the first time, be sure to read this document through and keep it ready to hand.

	DANGER
	Danger that leads directly to serious or irreversible injuries, or even death.

	WARNING
	Danger that can lead to serious injuries or even death.

	CAUTION
	Danger that can lead to minor injuries and damage.

The appliance must

- only be used by persons, who have been instructed in its correct usage and explicitly commissioned with the task of operating it
- only be operated under supervision
- not be used by children

Before starting work, the operating staff must be informed on

- use of the vacuum cleaner
- risks associated with the material to be picked up
- safe disposal of the picked up material

1. Do not use any unsafe work techniques.
2. Never use the vacuum cleaner without a filter.
3. Switch off the appliance and disconnect the mains plug in the following situations:
 - Prior to cleaning and servicing
 - Prior to replacing components
 - Prior to changing over the appliance
 - If foam develops or liquid emerges

Besides the operating instructions and the binding accident prevention regulations valid in the country of use, observe recognised regulations for safety and proper use.

Purpose and intended use

Since 1997, there is a new division of hazardous dusts and their assigned vacuum machines. These are regulated by IEC 60335-2-69 (world wide) and by EN 60335-2-69 (European wide).

The safety label on the machine warns:

This appliance contains dust hazardous to health. Emptying and maintenance operations, including removal of the dust collecting means, must only be carried out by authorized personnel wearing suitable personal protection. Operate only after the full filtration system has been fitted and checked.



Dust Class M (medium). The dusts which belong to this class are: dusts with OEL values¹⁾ $\geq 0.1 \text{ mg/m}^3$ as well as saw dust. The machine is tested in its entirety by vacuums for this dust class. The maximum degree of permeability is 0.1% and the disposal must be low dust.



Dust Class H (high). The dusts which belong to this class are: dusts with OEL values¹⁾, all carcinogenic dusts and dusts which are mixed with pathogenic agents. Vacuums for Dust Class H are tested in their entirety and have a maximum degree of permeability of 0.005%. The disposal must be dust free.

The air flow in Safety Vacuum systems has to be strictly controlled to achieve a minimum flow rate of $V_{min} = 20 \text{ m/s}$ in the suction hose.

The vacuum cleaners ATTIX 965-0H/M SD XC and ATTIX 965-2H/M SD XC are suitable to pick up

- dry, nonflammable dust, non flammable liquids, sawdust and hazardous dusts with OEL values¹⁾, carcinogenic dusts, dusts containing germs

When dust removers are used, the rate at which air is exchanged in the room must be adequate if the exhaust air from the vacuum cleaner is blown into the room (please observe regulations valid in your country).

The vacuum cleaner is suitable for commercial use, such as e.g. in

- Hotels, Schools, Hospitals, Factories, Shops, Offices, Hire shops

Any other use is considered as improper use. The manufacturer accepts no liability for any damage resulting from such use. The risk for such use is borne solely by the user.

Proper use also includes proper operation, servicing and repairs as specified by the manufacturer.

Transport

1. Before transporting the dirt tank, close all the locks.
2. Make sure that both plugs are inserted in fittings.
3. Do not tilt the cleaner if there is liquid in the dirt tank.
4. Do not use a crane hook to lift the cleaner.

Storage

1. Store the appliance in a dry place, protected from frost.



Electrical connection

1. It is recommended that the vacuum cleaner should be connected via a residual current circuit breaker.
2. Arrange the electrical parts (sockets, plugs and couplings) and lay down the extension lead so that the protection class is maintained.
3. Connectors and couplings of power supply cords and extension leads must be watertight.

Extension lead

As an extension lead, only use the version specified by the manufacturer or one of a higher quality.

When using an extension lead, check the minimum cross-sections of the cable:

Cable length	Cross section	
	< 16 A	< 25 A
up to 20 m	1.5 mm ²	2.5 mm ²
20 to 50 m	2.5 mm ²	4.0 mm ²

Maintenance, cleaning and repair

During the following work, ensure that dust is not unnecessarily spread around. Wear a P2 breathing mask.

Only carry out maintenance work described in the operating instructions.

Always pull out the mains plug before cleaning and maintenance of the vacuum cleaner.

During maintenance and cleaning, handle the vacuum cleaner in such a manner that there is no danger for maintenance staff or other persons.

In the maintenance area

1. Use filtered compulsory ventilation
2. Wear protective clothing
3. Clean the maintenance area so that no harmful substances get into the surroundings

Before removing the vacuum cleaner from the area contaminated with harmful substances:

1. Clean the outside of the vacuum cleaner, wipe it clean or pack the vacuum cleaner in well sealed packaging
2. and avoid spreading deposited harmful dust.

Warning: Do not reuse the essential filter element after removal out of the appliance (only for class H appliances).



During maintenance and repair work all contaminated parts that could not be cleaned satisfactorily must be:

1. packed in well sealed bags
2. disposed of in a manner that complies with valid regulations for such waste removal.

At least once a year, a Nilfisk-ALTO technician or an instructed person must perform a technical inspection including filters, air tightness and control mechanisms. According to AA.22.201.2 appliances in class H must have their filtration efficiency checked once a year. If the efficiency of the filter does not fulfil the requirements for dust class H, the filter must be replaced, and the new filter must be tested according to AA.22.201.2.



Risks

Electrical components

DANGER	
	<p>Electric shock due to faulty mains connecting lead. Touching a faulty mains connecting lead can result in serious or even fatal injuries.</p> <ol style="list-style-type: none"> 1. Do not damage the mains power lead (e.g. by driving over it, pulling or crushing it). 2. Regularly check whether the power cord is damaged or shows signs of ageing. 3. Have the faulty mains connecting lead replaced by your Nilfisk-Alto service representative or a qualified electrician prior to using the appliance again.

DANGER	
	<p>The upper section of the vacuum cleaner contains live components. Contact with live components leads to serious or even fatal injuries.</p> <ol style="list-style-type: none"> 1. Never spray water on to the upper section of the vacuum cleaner.

CAUTION	
	<p>Damage due to unsuitable mains voltage. The appliance can be damaged as a result of being connected to an unsuitable mains voltage.</p> <ol style="list-style-type: none"> 1. Ensure that the voltage shown on the rating plate corresponds to the voltage of the local mains power supply.

CAUTION	
	<p>Appliance socket¹⁾ The appliance socket is only designed for the purposes defined in the operating instructions. The connection of different appliances can result in damage.</p> <ol style="list-style-type: none"> 1. Prior to plugging in an appliance, always switch off the vacuum cleaner and the appliance that is to be connected. 2. Read the operating instructions to the appliance to be connected and observe the safety notes contained in these.

Picking up liquids

CAUTION	
	<p>Picking up liquids. Due to their construction vacuum cleaners with a removable tank (SD) do not have an automatic level indicator. There is a risk of damage to the vacuum cleaner due to overfilling or of damage due to leakage of the picked up liquid.</p> <ol style="list-style-type: none"> 1. Never pick up more than 40 litres at once. 2. Switch off the vacuum cleaner and empty the dirt tank.



Hazardous materials

	WARNING
	<p>Hazardous materials.</p> <p>Vacuuming up hazardous materials can lead to serious or even fatal injuries</p> <ol style="list-style-type: none"> 1. The following materials must not be picked up by the vacuum cleaner: <ul style="list-style-type: none"> - hot materials (burning cigarettes, hot ash, etc.) - flammable, explosive, aggressive liquids (e.g. petrol, solvents, acids, alkalis, etc.) - flammable, explosive dust (e.g. magnesium or aluminium dust, etc.)
	WARNING
	<p>When the vacuum cleaner has been used with dust classified as "H", it is necessary to clean the machine thoroughly before using the machine with dust classified as "M" or lower.</p>

Spare parts and accessories

	CAUTION
	<p>Spare parts and accessories.</p> <p>The use of non-genuine spare parts and accessories can impair the safety of the appliance.</p> <ol style="list-style-type: none"> 1. Only use spare parts and accessories from Nilfisk-Alto. 2. Use only the brushes supplied with the vacuum cleaner or specified in the operating manual.

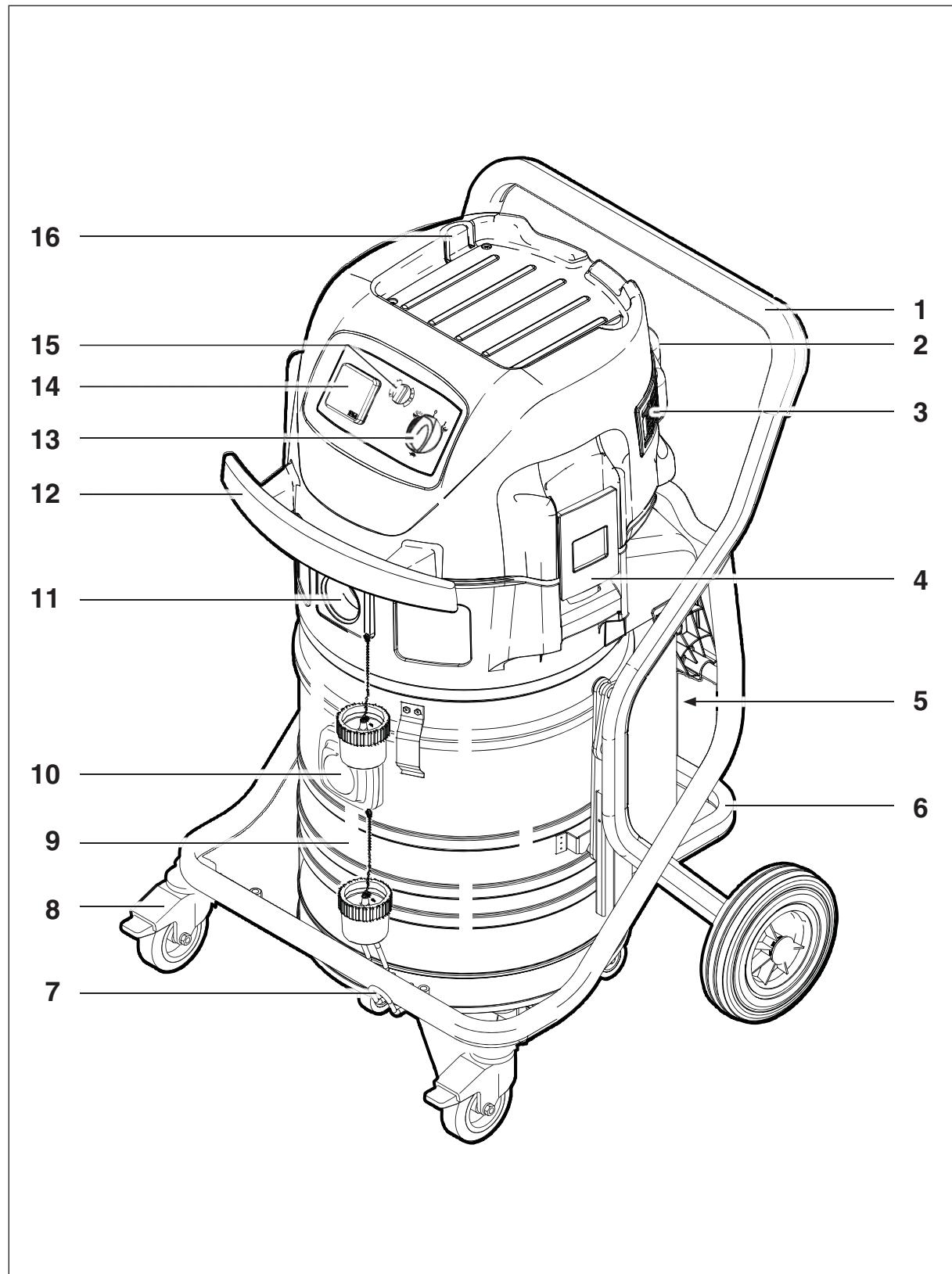
Emptying dirt tank

	CAUTION
	<p>Picking up environmentally hazardous materials.</p> <p>Materials picked up can present a hazard to the environment.</p> <ol style="list-style-type: none"> 1. Dispose of the dirt in accordance with legal regulations.



2 Description

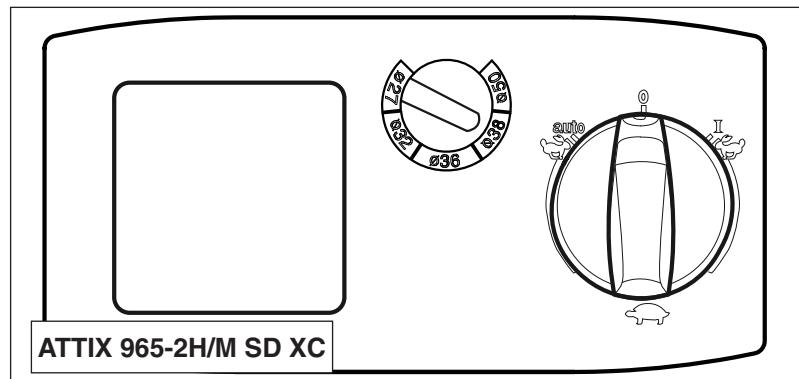
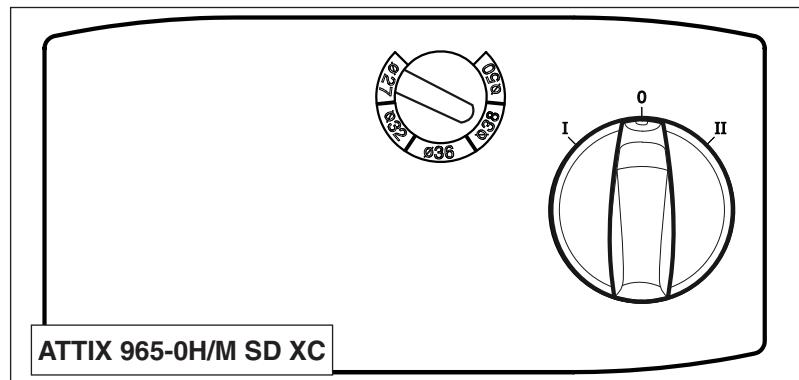
2.1 Operating elements





- 1 Handle
- 2 Outlet for waste air
- 3 Inlet for fresh air
- 4 Retaining clamp
- 5 Handle to remove dirt tank
- 6 Swivel bar to remove dirt tank
- 7 Bracket for floor nozzle
- 8 Castor with brake
- 9 Dirt tank
- 10 Inlet fitting "H"
- 11 Inlet fitting "M"
- 12 Receptacle for electrical lead
- 13 Appliance switch "I-0-II" ¹⁾
Appliance switch with suction power control 'auto-0-I' ¹⁾
- 14 Appliance socket ¹⁾
- 15 Hose diameter setting
- 16 Accessory holder

2.2 Operating panel



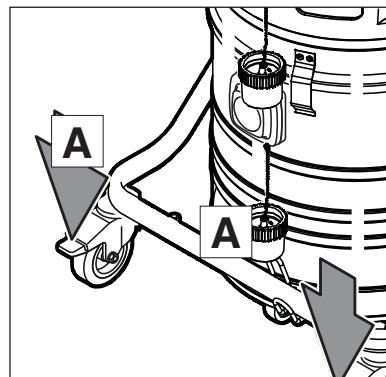
¹⁾Optional accessories / Option depending on model
Original Instructions



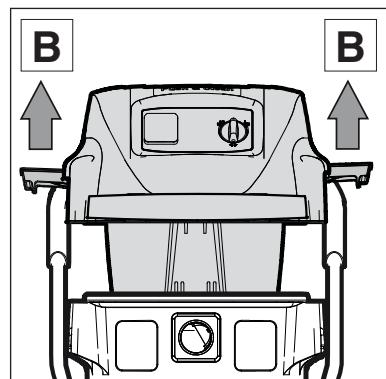
3 Before starting the cleaner

3.1 Assembling the vacuum cleaner

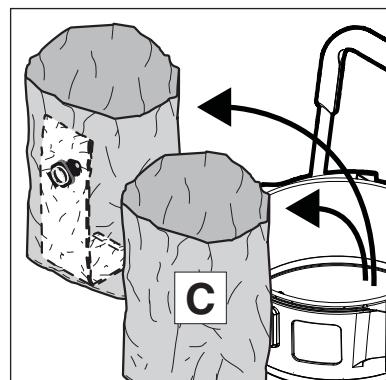
3.1.1 Taking accessories out of the packaging



1. Take vacuum cleaner and accessories out of the packaging.
2. The mains plug should not yet be inserted into a socket.
3. Apply parking brakes (A) on both castors.



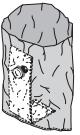
4. Open the retaining clamps (B) and remove the upper section of the vacuum cleaner.



5. Take the accessories (C) out of the dirt tank and the packaging.

3.1.2 Before starting the cleaner

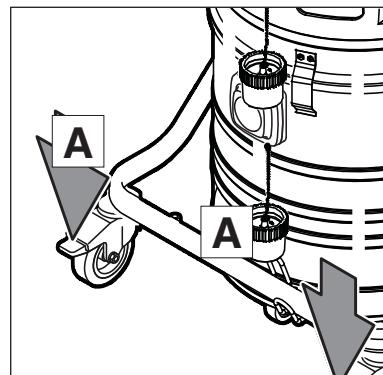
Depending on how hazardous the dust is, the cleaner must be fitted with appropriate filters.

Type of dust	Filter bag/waste bag	
<ul style="list-style-type: none"> Non-hazardous dust Non-carcinogenic dust with OEL values $\geq 0.1 \text{ mg/m}^3$ (observe any additional national regulations) 		Waste bag (5 pcs.) Order No. 302001480
<ul style="list-style-type: none"> All dusts with OEL values Wood dust 		Safety filter bag (5 pcs.) Order No. 302003473
<ul style="list-style-type: none"> All dusts with OEL values Wood dust 		Filter element "H" Order No. 107400564

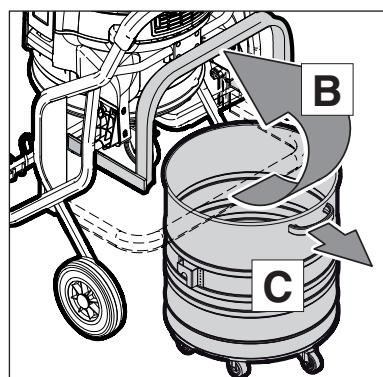
Before picking up dust with occupational exposure limit values:

- Check that all the filters are present and properly fitted.
- The hose diameter and the setting for the suction hose diameter must be the same.
- When the motor is running, hold the suction hose shut. For safety reasons, an acoustic warning sounds if the air speed in the suction hose drops to below 20 m/s.

3.1.3 Inserting the safety filter bag



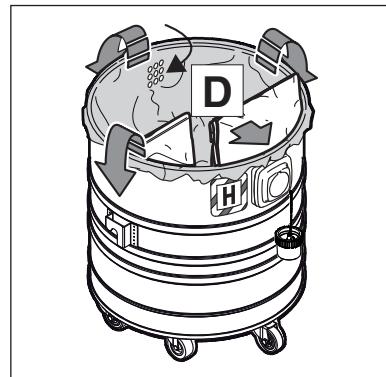
- The mains plug should not yet be inserted into a socket.
- Apply parking brakes (A) on both castors.



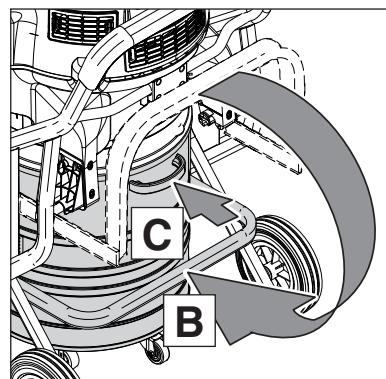
- Swing the bar (B) upwards.
- Use the handle (C) to pull the dirt tank out of the vacuum cleaner.

¹⁾Optional accessories / Option depending on model
Original Instructions

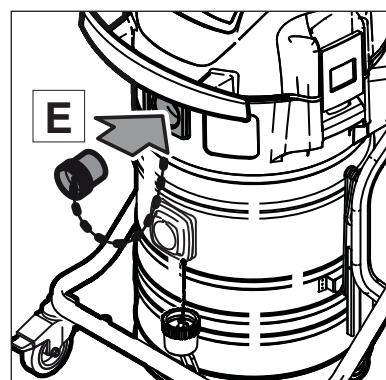
GB



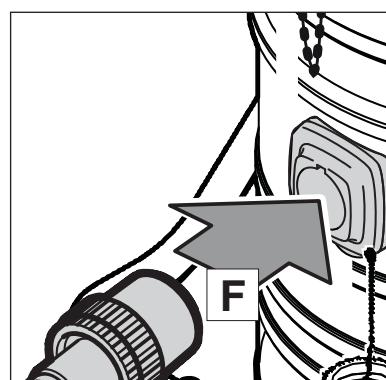
5. Insert the safetyfilter bag (D) in the dirt tank.
6. Fold the top edge of the disposal bag over the rim of the dirt tank.



7. Push the dirt tank as far as possible into the vacuum cleaner.
8. Swing the bar (B) downwards without forcing it.



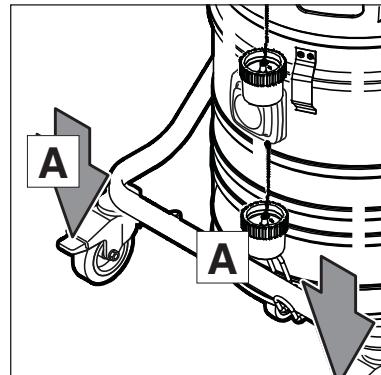
9. Close inlet fitting "M" (top) with plug (E).



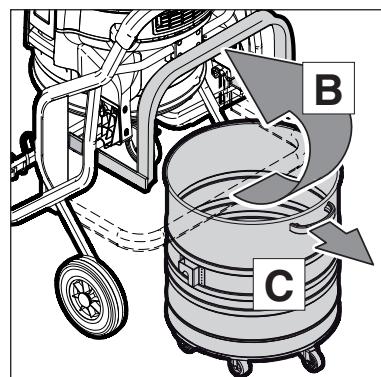
10. Connect suction hose to inlet fitting "H" (bottom) (F).



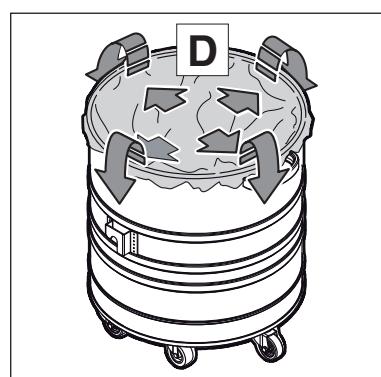
3.1.4 Inserting the disposal bag



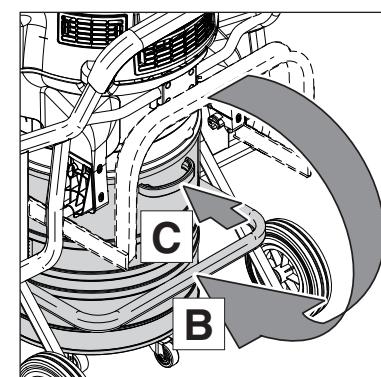
1. The mains plug should not yet be inserted into a socket.
2. Apply parking brakes (A) on both castors.



3. Swing the bar (B) upwards.
4. Use the handle (C) to pull the dirt tank out of the vacuum cleaner.

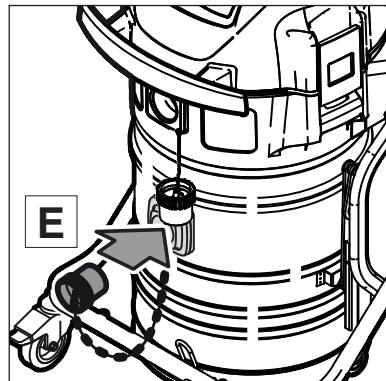


5. Insert the disposal bag (D) in the dirt tank.
6. Fold the top edge of the disposal bag over the rim of the dirt tank.

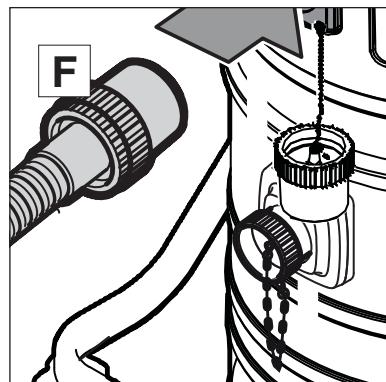


7. Push the dirt tank as far as possible into the vacuum cleaner.
8. Swing the bar (B) downwards without forcing it.

GB



9. Close inlet fitting "H"
(bottom) with plug (E).



10. Connect suction hose to inlet
fitting "M" (top) (F).

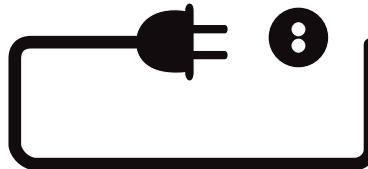
4 Control / Operation



4.1 Connections

4.1.1 Electrical connection

The operating voltage shown on the rating plate must correspond to the voltage of the mains power supply.



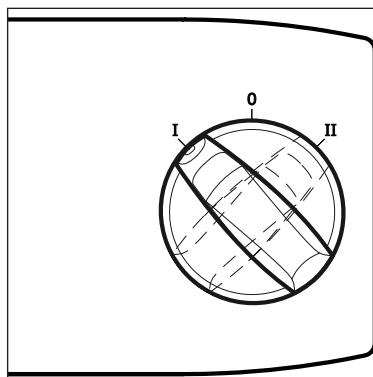
1. Ensure that the cleaner is switched off.
2. Insert the power cord into a properly installed and fused socket with earthing contact.

4.2 Switching on the vacuum cleaner

4.2.1 Switch "I-0-II" ¹⁾

The hose diameter and the setting for the suction hose diameter must be the same.

ø27	ø27
ø32	ø32
ø36	ø36
ø38	ø38
ø50	ø50

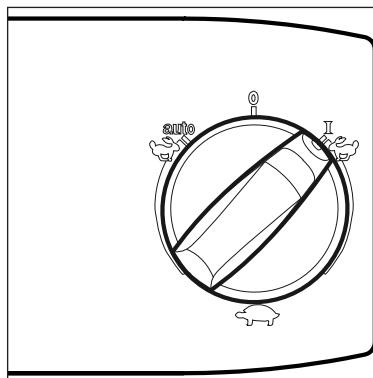


Switch position	Function
I	Reduced suction
0	Off
II	Maximum suction

4.2.2 Switch „auto-0-I“ ¹⁾

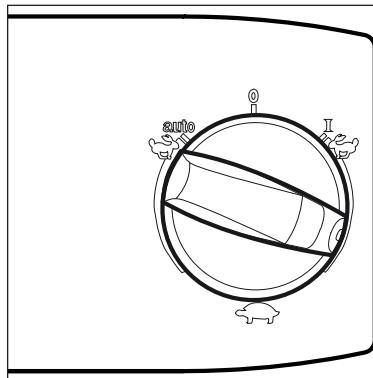
The hose diameter and the setting for the suction hose diameter must be the same.

ø27	ø27
ø32	ø32
ø36	ø36
ø38	ø38
ø50	ø50



Switch position	Function
I	Maximum suction

4.2.3 Suction power control ¹⁾



Switch position	Function
	The suction power control switch allows precise adaptation of the suction power for different cleaning tasks.

¹⁾Optional accessories / Option depending on model
Original Instructions

GB

4.2.4 Auto-On/Off-Operation

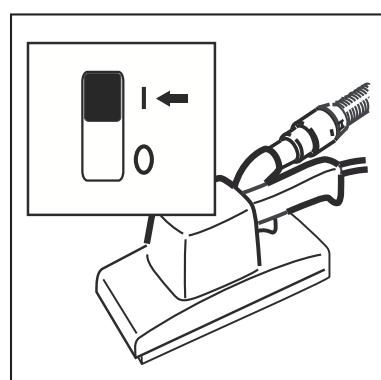
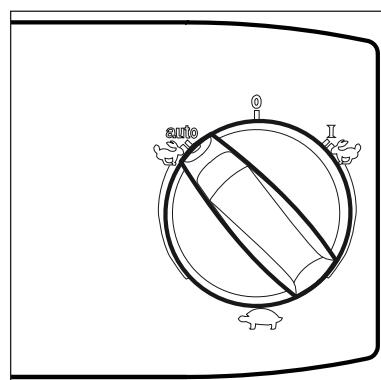
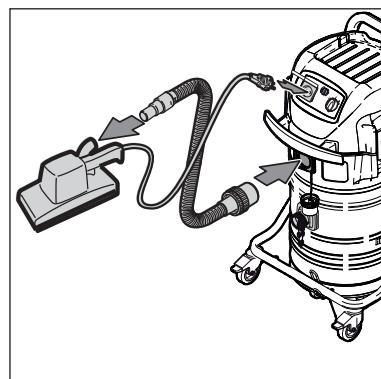
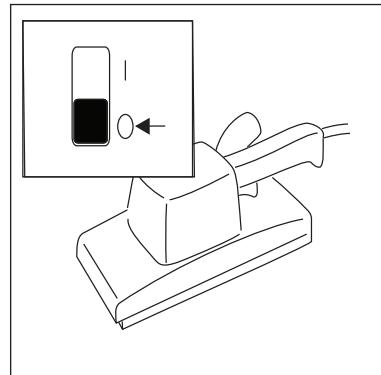
- "auto" switch position ¹⁾

The vacuum cleaner is switched on and off by the power tool connected. Dirt is picked up from the source of dust immediately.

To comply with regulations, only approved dust producing tools should be connected.

The maximum power consumption of the connected electrical appliance is stated in section 9.5 "Technical data".

Before switching the switch to position „auto“, ensure that the tool connected to the appliance socket is switched off.



1. Switch off the vacuum cleaner.
2. Switch off the power tool.

3. Connect the power tool and the vacuum cleaner with a suction hose.
4. Insert the plug of the power tool into the tool socket on the operating panel of the vacuum cleaner.

5. Switch on the vacuum cleaner. Switch in "auto" position.

6. Switch on the power tool. The vacuum cleaner motor starts when the connected power tool is switched on. When the power tool is switched off, the vacuum cleaner continues to run for a short moment so that any dust in the suction hose is conveyed to the filter bag.



4.3 Check volume flow monitor

Before picking up dust with maximum room concentration values:

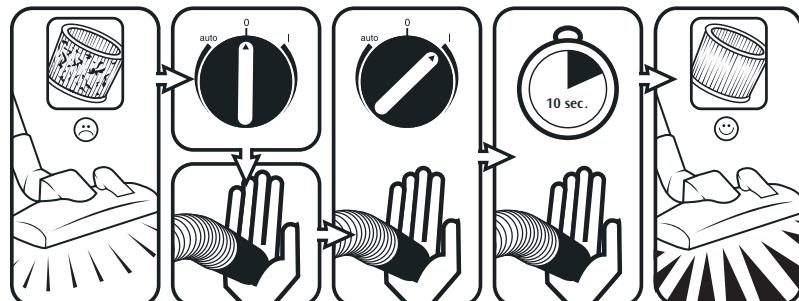
1. Check that all the filters are present and properly fitted.
2. When the motor is running, hold the suction hose shut. An acoustic warning sounds after approx. 1 second.

4.4 Acoustic warning

For safety reasons, an acoustic warning sounds if the air speed in the suction hose drops to below 20 m/s. See section "Troubleshooting".

4.5 Cleaning the filter element

After picking up harmless dust using the waste bag.



To ensure that suction performance is always at its best, the filter element is automatically cleaned during operation. We recommend complete cleaning if the filter element becomes extremely dirty.

1. Switch off the vacuum cleaner
2. Close the nozzles or suction hose opening with the palm of your hand.
3. Turn the switch to position „I“ and let the cleaner operate for approx. 10 seconds with the suction hose opening closed.



5 Applications and methods

5.1 Techniques

If used correctly, additional accessories, suction nozzles and suction hoses can enhance the cleaning action and reduce the cleaning effort.

Effective cleaning is achieved if you follow just a few guidelines in combination with your own practical experience in special fields.

Here are some basic tips.

5.1.1 Picking up dry substances

CAUTION!

Do not pick up flammable substances.

There must always be a safety filter bag in the tank before dry substances with maximum room concentration values are picked up. See section "Accessories" for ordering number.

To pick up harmless dust we recommend the use of a waste bag. See section "Accessories" for ordering number. Disposal of the picked up material is then simple and hygienic.

After picking up liquids, the filter element is wet. A damp filter element clogs more quickly when dry substances are picked up. For this reason the filter element should be washed and dried or replaced by a dry element before dry substances are picked up.

5.1.2 Picking up liquids

CAUTION!

Do not pick up flammable liquids.

Before liquids are picked up, always remove the filter bag/disposal bag.

The use of a separate filter element or filter screen is recommended.

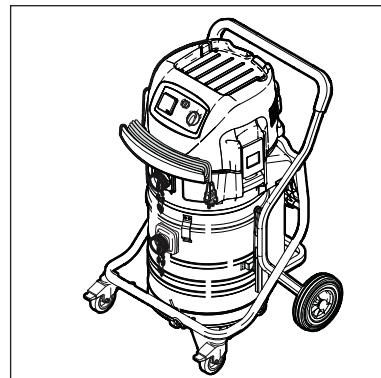
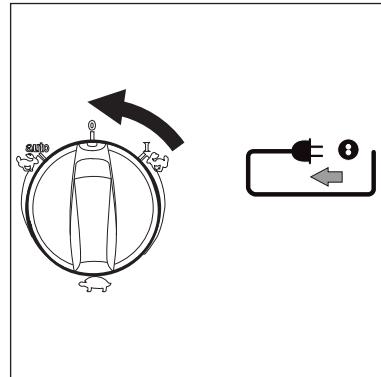
If foam appears, stop work immediately and empty the tank.

To reduce the amount of foam, use foam killer Nilfisk-Alto Foam Stop (see section "Accessories" for order number).



6 After using the cleaner

6.1 Switching the vacuum cleaner off and storage



1. After picking up hazardous dust, vacuum clean the outside of the cleaner.
2. Switch off the vacuum cleaner and pull the mains plug out of the socket.
3. Make sure that both plugs are inserted in fittings.
4. Wind up the power cord and hang it on the handle.
5. Empty the tank and clean the vacuum cleaner.
6. After picking up liquids: Store the upper section of the cleaner separately so that the filter element can dry.
7. Store the vacuum cleaner in a dry room where it is protected from unauthorized use.



7 Maintenance

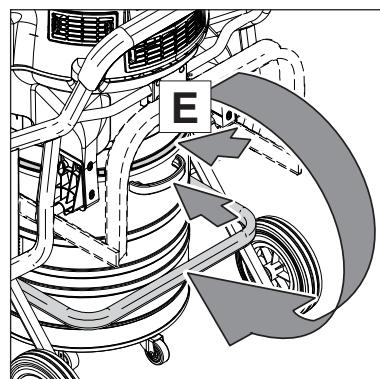
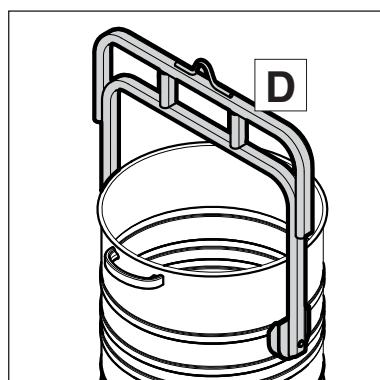
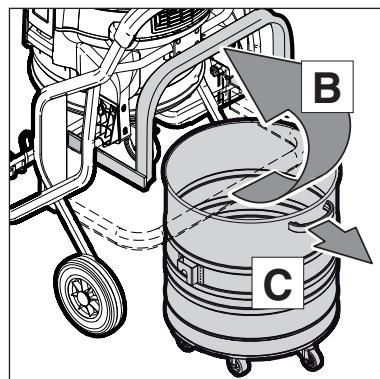
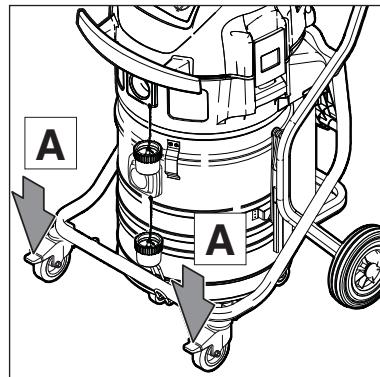
7.1 Maintenance plan

		After finishing work	When required
7.2.1	Emptying dirt tank	●	
7.2.2	Replacing the disposal bag		●
7.2.3	Replacing the safety filter bag		●
7.2.4	Replacing filter element "H"		●



7.2 Maintenance work

7.2.1 Emptying the dirt tank



1. Switch off the vacuum cleaner and pull the mains plug out of the socket.
2. Apply parking brakes (A) on both castors.

Removing the dirt tank:

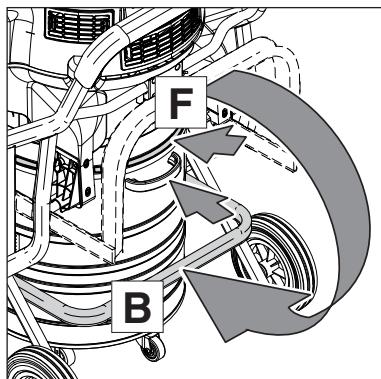
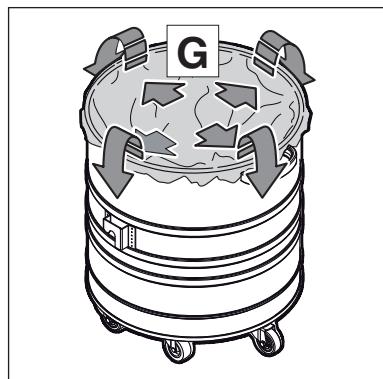
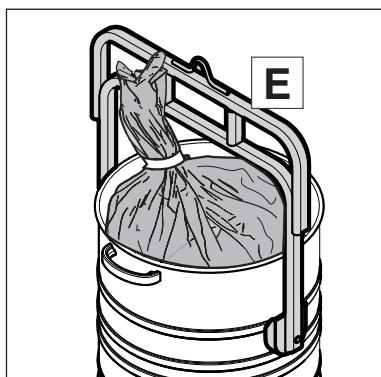
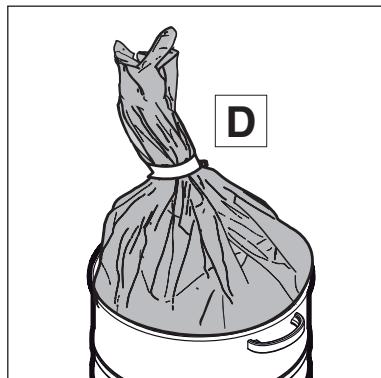
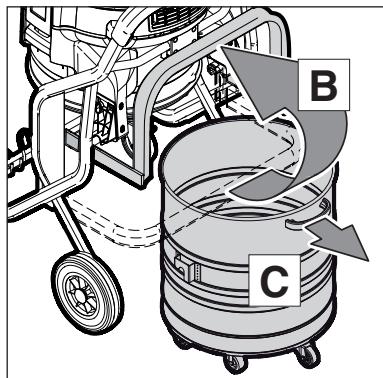
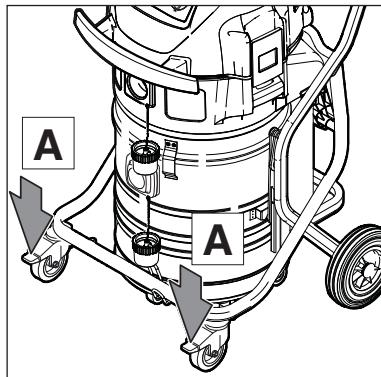
3. Swing the bar (B) upwards.
4. Use the handle (C) to pull the dirt tank out of the vacuum cleaner.
5. Tipping out the collected dirt: **WARNING!** If heavy dirt has been picked up, never lift the dirt tank alone. Use the FORKLIFT (D), which is available as an accessory.
6. Use a crane or fork lift truck to position the FORKLIFT above the dirt tank.
7. Attach the tank to the accessory.
8. Dispose of the dirt in accordance with legal regulations.

Inserting the dirt tank:

9. Clean the dirt tank.
10. Check the seals (E) between the tank and the upper section of the vacuum cleaner.
11. Push the dirt tank as far as possible into the vacuum cleaner.
12. Swing the bar (B) downwards without forcing it.

GB

7.2.2 Replacing the disposal bag



1. Switch off the vacuum cleaner and pull the mains plug out of the socket.
2. Apply parking brakes (A) on both castors.

Removing the disposal bag:

3. Swing the bar (B) upwards.
4. Use the handle (C) to pull the dirt tank out of the vacuum cleaner.
5. Close the disposal bag with string (D) and remove it from the dirt tank.

WARNING!

If heavy dirt has been picked up, never lift the dirt tank alone. Use the FORKLIFT (E), which is available as an accessory.

6. Use a crane or fork lift truck to position the FORKLIFT above the dirt tank.
7. Attach the tank to the accessory.
8. Dispose of the dirt in accordance with legal regulations.

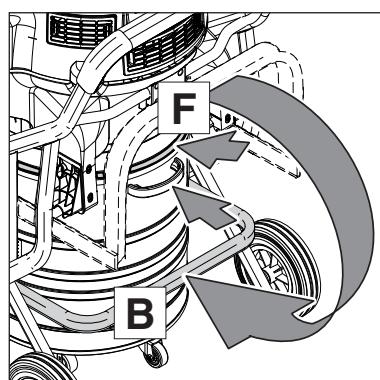
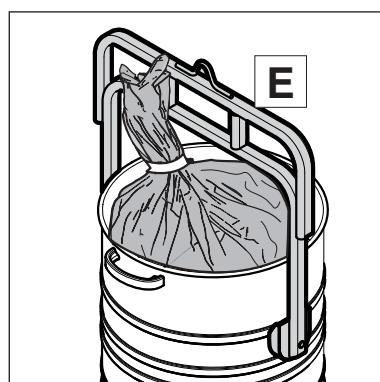
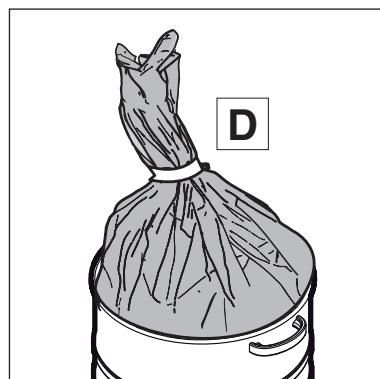
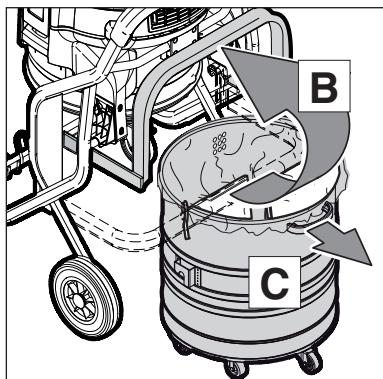
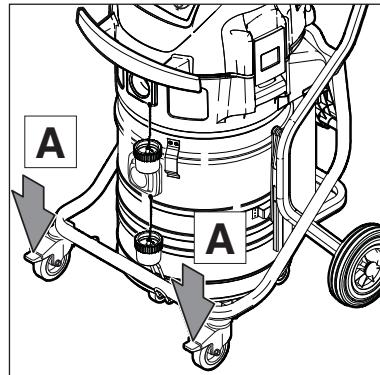
Inserting the disposal bag:

9. Clean the dirt tank.
10. Check the seals (F) between the tank and the upper section of the vacuum cleaner.
11. Insert the disposal bag (G) in the dirt tank.
12. Fold the top edge of the disposal bag over the rim of the dirt tank.
13. Push the dirt tank as far as possible into the vacuum cleaner.
14. Swing the bar (B) downwards without forcing it.



7.2.3 Replacing the safety filter bag

During the following work, ensure that dust is not unnecessarily spread around. Wear a P2 breathing mask.



1. Switch off the vacuum cleaner and pull the mains plug out of the socket.
2. Apply parking brakes (A) on both castors.

Removing the safety filter bag:

3. Swing the bar (B) upwards.
4. Use the handle (C) to pull the dirt tank out of the vacuum cleaner.
5. Close the disposal bag with string (D) and remove it from the dirt tank.

WARNING! If heavy dirt has been picked up, never lift the dirt tank alone. Use the FORKLIFT (E), which is available as an accessory.

6. Use a crane or fork lift truck to position the FORKLIFT above the dirt tank.
7. Attach the tank to the accessory.
8. Dispose of the dirt in accordance with legal regulations.

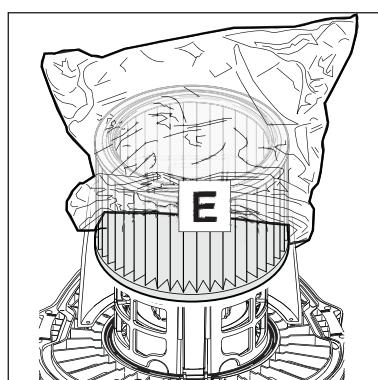
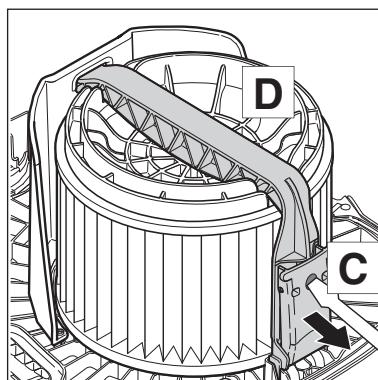
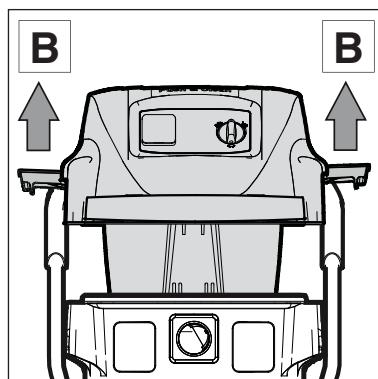
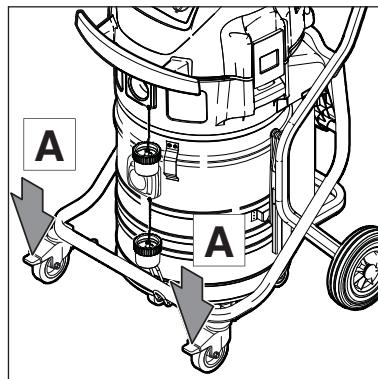
Inserting the safety filter bag:

9. Clean the dirt tank.
10. Check the seals (F) between the tank and the upper section of the vacuum cleaner.
11. Insert the safety filter bag (G) in the dirt tank.
12. Fold the top edge of the disposal bag over the rim of the dirt tank.
13. Push the dirt tank as far as possible into the vacuum cleaner.
14. Swing the bar (B) downwards without forcing it.

GB

7.2.4 Replacing filter element "H"

During the following work, ensure that dust is not unnecessarily spread around. Wear a P2 breathing mask.



1. Switch off the vacuum cleaner and pull the mains plug out of the socket.
2. Apply parking brakes (A) on both castors.

3. Open the retaining clamps (B) and remove the upper section of the vacuum cleaner.

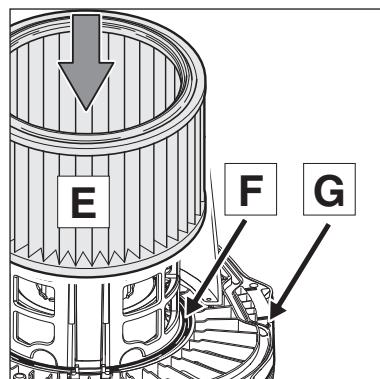
Remove the filter element:

4. Lay the upper section of the cleaner down with the filter element facing upwards.
5. Unscrew the screw (C), open the bar handle and remove it.
6. Remove the filter holder (D).

7. Place the protective filter bag over the filter element.

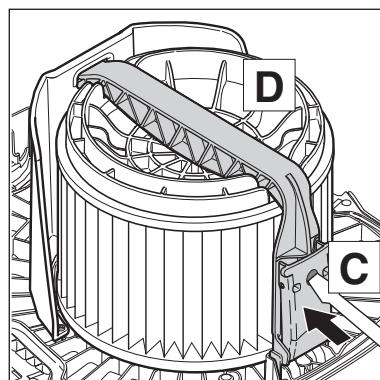


8. Carefully remove the filter element and close the protective filter bag with a knot.



Inserting the filter element:

9. Clean the filter seal (F). Check it for damage and replace it if necessary.
10. Check the antistatic clamp (G) for damage and have it replaced by Nilfisk-Alto Service if necessary.
11. Fit a new filter element.
12. Fit the filter holder (D). Ensure that it is in the correct position.
13. Fit bar and close bar handle (C).
14. Dispose of the used filter element in accordance with legal regulations.





8 Troubleshooting

Fault	Cause	Remedy
✗ Motor does not start	<ul style="list-style-type: none"> > Fuse of the mains socket has blown. > Overload protection switch has tripped. > Motor is faulty. 	<ul style="list-style-type: none"> • Connect mains fuse. • Switch off the vacuum cleaner and allow it to cool for approx. 5 minutes. If the cleaner cannot be started again, contact the Nilfisk-Alto service department. • Have motor changed by Nilfisk-Alto Service.
✗ Motor does not run in automatic mode ¹⁾	<ul style="list-style-type: none"> > Power tool/pneumatic tool is defective or not connected properly. > The power rating of the electrical tool is too low. 	<ul style="list-style-type: none"> • Check that the power tool works or that the plug is inserted correctly. • Note that minimum power rating is P>40W
✗ The acoustic warning sounds. (Reduced suction power)	<ul style="list-style-type: none"> > Suction power selected with suction power control is too low. > Hose diameter does not correspond with switch position. > Clogged suction hose/nozzle. > The safety filter bag is full. > Filter element is clogged. > Cleaning mechanism is defective. 	<ul style="list-style-type: none"> • Set suction power in accordance with section „Setting suction power“. • Set correct switch position for hose diameter. • Clean suction hose/nozzle • See section „Replacing the filter bag“. • See section „Cleaning filter element“ and „Replacing filter element“. • Contact Nilfisk-Alto Service.
✗ No suction power during wet cleaning	<ul style="list-style-type: none"> > Tank is full. 	<ul style="list-style-type: none"> • Switch off the cleaner. Empty the tank.
✗ Voltage fluctuations	<ul style="list-style-type: none"> > Impedance of power supply is too high. 	<ul style="list-style-type: none"> • Connect the cleaner to another socket closer to the fuse box. Voltage fluctuations over 7% should not occur if the impedance at the transfer point is $\leq 0.15 \Omega$.

9 Further information



9.1 Recycling the cleaner

Make the old cleaner unusable immediately.

1. Unplug the cleaner.
2. Cut the power cord.
3. Do not discard of electrical appliances with household waste.



As specified in European Directive 2002/96/EC on old electrical and electronic appliances, used electrical goods must be collected separately and recycled ecologically. Contact your local authorities or your nearest dealer for further information.

9.2 Guarantee

Our general conditions of business are applicable with regard to the guarantee.

Subject to change as a result of technical advances.

9.3 Tests and approvals

Electrical tests must be performed in accordance with the provisions of safety regulations (VBG4) and to DIN VDE 0701 Part 1 and Part 3. In accordance with DIN VDE 0702 these tests must be performed at regular intervals and after repairs or modifications.

The vacuum cleaner has been approved in accordance with IEC/EN 60335-2-69.

9.4 EC declaration of conformity

	EC declaration of conformity
NILFISK-ADVANCE A/S Sognevej 25 DK-2605 Brøndby	
Product:	Vacuum cleaner for wet and dry operation
Model:	ATTIX 965-0H/M SD XC ATTIX 965-2H/M SD XC
Description:	230-240 V~, 50/60 Hz
The design of the appliance corresponds to the following pertinent regulations:	EC Machine Directive 98/37/EC EC Low Voltage Directive 73/23/EC EC EMC Directive 89/336/EC
Applied harmonized standards:	EN ISO 12100-1, EN ISO 12100-2 EN 60335-1 EN 60335-2-69 EN 55014-1, EN 55014-2, EN 61000-3-2
Applied national standards and technical specifications:	DIN EN 60335-1 DIN EN 60335-2-69
	Brøndby, 01.04.2008
Anton Sørensen General Manager EAPC Technical Operations	

¹⁾Optional accessories / Option depending on model
Original Instructions



9.5 Technical data

ATTIX			
		965-0H/M SD XC	965 2H/M SD XC
		EU	DK
Voltage	V	230	
Mains frequency	Hz	50/60	
Fuse	A	16	10
Power consumption _{IEC}	W	2 x 1200	2 x 1000
Connected load for appliance socket	W		300
Total connected load	W	2400	2300
Air flow rate	m ³ /h l/min	2 x 216 2 x 3600	2 x 174 2 x 2900
Vacuum	hPa/mbar kPa	230/23	210/21
Sound pressure level at a distance of 1 m, EN 60704-1	dB(A)	70 ± 2	
Sound level	dB(A)	67 ± 2	
Power cord: Length	m	10	
Power cord: Type		H07RN-F3G1,5 mm ²	H07RN-F3G1,0 mm ²
Protection class		I	
Type of protection (splash water protected)		IP X4	
Radio interference level		EN 55014-1	
Tank volume	l	50	
Width	mm	615	
Depth	mm	690	
Height	mm	990	
Weight	kg	45	

9.6 Optional accessories

Description	Order No.
Safety filter bag (5 pcs.)	302003473
Disposal bag (5 pcs.)	302001480
Filter element "H"	107400564
Nilfisk-Alto-Foam-Stop (6 x 1 l)	8469

HEAD QUARTER

DENMARK

Nilfisk-Advance Group
Sognevej 25
DK-2605 Brøndby
Tel.: (+45) 4323 8100
E-mail: mail.com@nilfisk-advance.com

SALES COMPANIES

ARGENTINA

Nilfisk-Advance srl.
Edificio Central Park
Herrera 1855, Office 604
Ciudad Autónoma de Buenos Aires
Tel.: (+54) 11 6091 1571

AUSTRALIA

Nilfisk-Advance
48 Egerton St.
P.O. Box 6046
Silverwater, N.S.W. 2128
Tel.: +61 2 8748 5900
E-mail: info@nilfisk-advance.com.au

AUSTRIA

Nilfisk-Advance GmbH
Metzgerstrasse 68
5101 Bergheim bei Salzburg
Tel.: 0662 456 400-14
E-mail: info.at@nilfisk-advance.com

BELGIUM

Nilfisk-Advance n.v.s.a.
Riverside Business Park
Boulevard Internationalelaan 55
Bâtiment C3/C4 Gebouw
Bruxelles 1070
Tel.: (+32) 2 467 60 50
E-mail: info.be@nilfisk-advance.com

CANADA

Nilfisk-Advance
240 Superior Boulevard
Mississauga, Ontario L5T 2L2
Tel.: (+1) 905 564 1149
E-mail: info@advance.ca.com

CHILE

Nilfisk-Advance de Chile
San Alfonso 1462
Santiago
Tel.: (+56) 2 684 5000
E-mail: Pablo.Noriega@nilfisk-advance.com

CHINA

Nilfisk-Advance (Suzhou)
Building 18, Suchun Industrial Estate
Suzhou Industrial Park
215021 Suzhou
Tel.: (+86) 512 6265 2525

CZECH REPUBLIC

Nilfisk-Advance
VGP Park Horní Počernice
Do Čertous 1/2658
193 00 Praha 9
Tel.: (+420) 24 14 08 419

DENMARK

Nilfisk-Advance A/S
Industriej 1
9560 Hadsund
Tel.: +45 7218 2100
E-mail: salg.dk@nilfisk-advance.com

FINLAND

Nilfisk-Advance Oy Ab
Pispantilankuja 4
02240 Espoo
Tel.: +358 207 890 600
E-mail: asiakaspalvelu.fi@nilfisk.com

FRANCE

Nilfisk-Advance
26 Avenue de la Baltique
Villebon sur Yvette
91944 Courtabœuf Cedex
Tel.: (+33) 1 69 59 87 00
E-mail: info.fr@nilfisk-advance.com

GERMANY

Nilfisk-ALTO
Geschäftsbereich der Nilfisk Advance AG
Guido-Oberdorfer-Strasse 10
D-89287 Bellenberg
Tel.: +49 (0) 180 5 37 37 37
E-mail: info.de@nilfisk-alto.com

GREECE

Nilfisk-Advance SA
8, Thoukididou str.
164 52 Argiropolis
Tel.: +30 210 911 9600
E-mail: nilfisk-advance@clean.gr

HOLLAND

Nilfisk-Advance
Versterkerstraat 5
1322 AN Almere
Tel.: (+31) 36 546 07 00
E-mail: info.nl@nilfisk-advance.com

HONG KONG

Nilfisk-Advance Ltd.
Room 2001 HK Worsted Mills
Industrial Building
31-39 Wo Tong Tsui Street
Kwai Chung
Tel.: (+852) 24 27 59 51

HUNGARY

Nilfisk-Advance Kereskedelmi Kft.
II. Rákóczi Ferenc út 10
2310 Szigetszentmiklos-Lakihegy
Tel.: (+36) 24475 550
E-mail: info@nilfisk-advance.hu

INDIA

Nilfisk-Advance India Limited
349, Business Point,
No 201,2nd floor, above Popular Car World,
Western Express High way, Andheri (East),
Mumbai - 400 069
Tel.: (+91) 223 2174592

IRELAND

Nilfisk-Advance
1 Stokes Place
St. Stephen's Green
Dublin 2
Tel.: (+35) 3 12 94 38 38

ITALY

Nilfisk-Advance SpA
Strada Comunale della Braglia, 18
26862 Guardamiglio (LO)
Tel.: +39 0377 41 40 46
E-mail: mercato.italia@nilfisk-advance.it

JAPAN

Nilfisk-Advance Inc.
1-6-6 Kita-shinjyokohama, Kouhoku-ku
Yokohama, 223-0059
Tel.: (+81) 45 548 2571

KOREA

Nilfisk-Advance
Kumwon B/D 3F, 471-4, Gunja-Dong
Gwangjin-Ku
Tel.: (+82) 2497 8636

MALAYSIA

Nilfisk-Advance Sdn Bhd
Sd 14, Jalan KIP 11
Taman Perindustrian KIP
Sri Damansara
52200 Kuala Lumpur
Tel.: (+603) 62753120

MEXICO

Nilfisk-Advance de Mexico, S. de R.L. de C.V.
Prol. Paseo de la Reforma 61, 6-A2
Col. Paseo de las Lomas
01330 Mexico, D.F.
Tel: +52 55 2591 1002 (switchboard)
E-mail: info@advance-mx.com

NEW ZEALAND

Nilfisk-Advance
Danish House
6 Rockridge Avenue
Penrose, Auckland 1135
Tel.: (+64) 95 25 00 92

NORWAY

Nilfisk-ALTO
Division of Nilfisk-Advance
Bjørnerudveien 24
1266 Oslo
Tel.: (+47) 22 75 17 70
E-mail: info.no@nilfisk-alto.com

POLAND

Nilfisk-Advance Sp. Z.O.O.

05-800 Pruszków

ul. 3-go MAJA 8

Tel.: +48 22 738 37 50

PORTUGAL

Nilfisk-Advance
Sintra Business Park
Zona Industrial Da Abrunheira
Edificio 1, 1º A
P2710-089 Sintra
Tel.: +35 121 911 2670
E-mail: mkt.pt@nilfisk-advance.com

RUSSIA

Нилфиск-Эдванс
127015 Москва
Вятская ул. 27, стр. 7
Россия
Tel.: (+7) 495 783 96 02
E-mail: info@nilfisk.ru

SINGAPORE

Nilfisk-Advance Pte. Ltd.
40 Loyang Drive
Singapore 508961
Tel.: (+65) 6759 9100

SPAIN

Nilfisk-Advance S.A.
Torre D'Ara
Paseo del Rengle, 5 Pl. 10
08302 Mataró
Tel.: (+3) 4 93 741 2400
E-mail: mkt.es@nilfisk-dvance.com

SWEDEN

Nilfisk-ALTO
Division of Nilfisk-Advance
Aminogatan 18
Box 40 29
431 04 Mölndal
Tel.: (+46) 31 706 73 00
E-mail: info.se@nilfisk-alto.com

SWITZERLAND

Nilfisk-Advance
Ringstrasse 19
Kircheberg/Industri Stelzl
9500 Wil
Tel.: (+41) 719 23 84 44
E-mail: info.ch@nilfisk-advance.com

TAIWAN

Nilfisk-Advance Taiwan Branch
1F, No. 193, sec. 2, Xing Long Rd.
Taipei
Tel.: (+88) 6227 002 268

THAILAND

Nilfisk-Advance Co. Ltd.
89 Soi Chokechai-Ruammitr
Viphavadee-Rangsit Road
Ladyao, Jatuchak, Bangkok 10900
Tel.: (+66) 2 275 5630

TURKEY

Nilfisk-Advance Profesional Temizlik
Ekipmanları Tic. A/S.
Necla Cad. No. 48
Yenisehra / Kadıköy
İstanbul
Tel.: (+90) 216 470 08 - 60
E-mail: info.tr@nilfisk-advance.com

UNITED KINGDOM

Nilfisk-Advance Ltd.
Unit 24
Hillside Business Park
Kempson Way
Bury St. Edmunds
Suffolk IP32 7EA
Tel.: (+49) 01284 763163
E-mail: sales.uk@nilfisk-advance.com

UNITED ARAB EMIRATES

Nilfisk-Advance Middle East Branch
SAIF-Zone
P.O. Box 122298
Sharjah
Tel.: (+971) 553 2626 82

USA

Nilfisk-Advance Inc.
14600 21st Avenue North
Plymouth, MN 55447-3408
Tel.: (+1) 763 745 3500

VIETNAM

Nilfisk-Advance Representative Office
No. 51 Doc Ngu Str.
Ba Dinh Dist.
Hanoi
Tel.: (+04) 761 5642
E-mail: nilfisk@vnn.vn